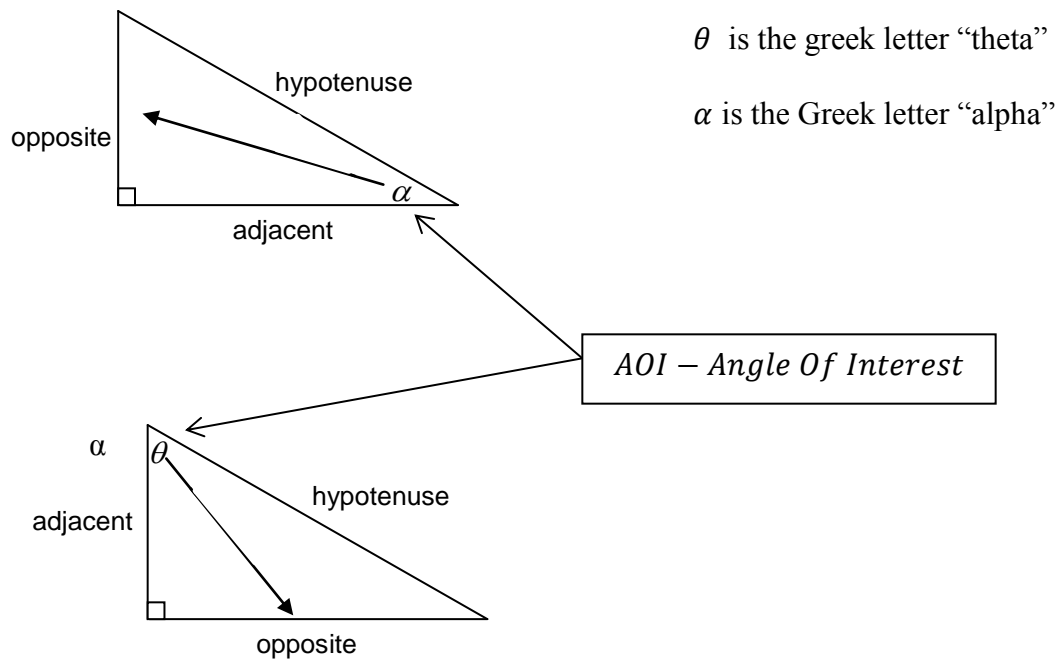


### 5.3 Ratios in Right Triangles



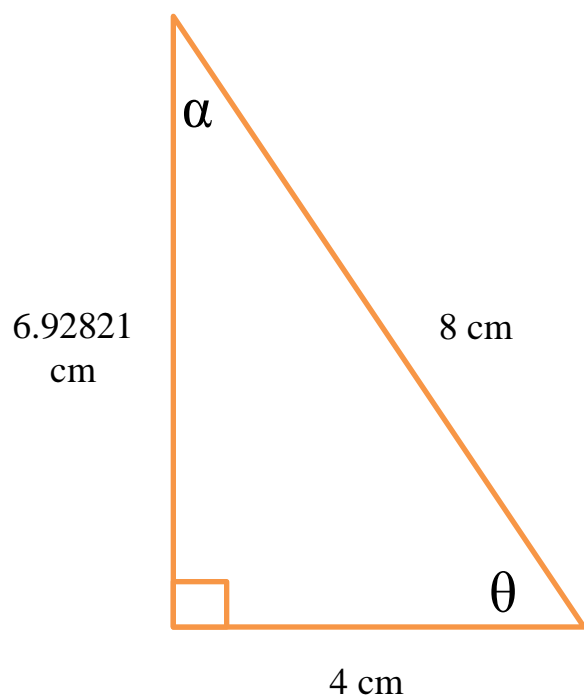
#### Three (3) Primary Trigonometric Ratios

$$\sin\theta = \frac{\text{opposite}}{\text{hypotenuse}}$$

$$\cos\theta = \frac{\text{adjacent}}{\text{hypotenuse}}$$

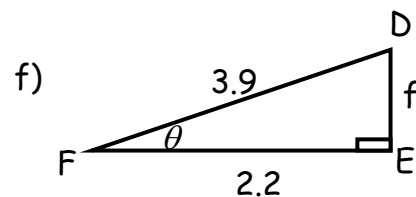
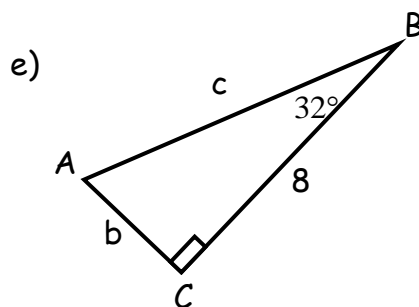
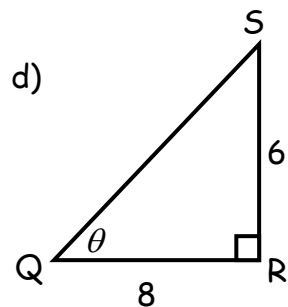
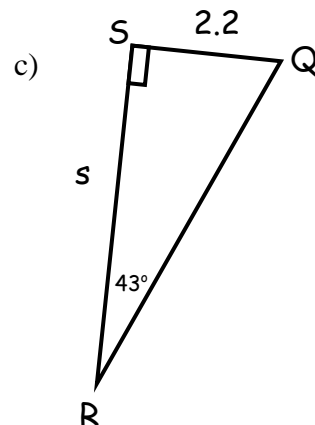
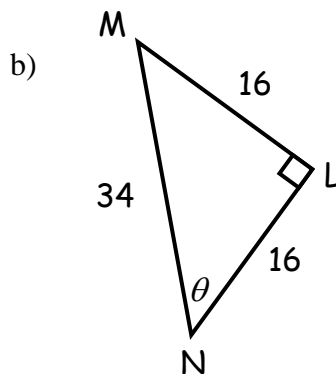
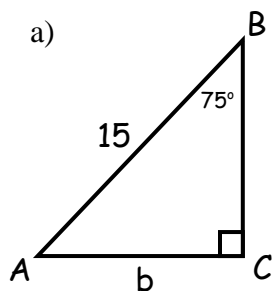
$$\tan\theta = \frac{\text{opposite}}{\text{adjacent}}$$

- Use these to solve for a missing side or angle



SOHCAHTOA

1) Determine the missing angle or side using the trigonometric ratios. Round your side lengths to two decimal places and angles to the nearest degree.



o

Answers: 1a)  $b=14.49$  b)  $\angle N = 45^\circ$  c)  $s = 2.4$  d)  $\angle Q = 37^\circ$  e)  $c=9.4$ ,  $b=5.0$  f)  $\angle F = 57^\circ$ ,  $d=3.2$

Assigned Work: p.398 # 7, 8, 9, 10, 11, 13